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AUTHOR	Thompson, Orville E.; And Others
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ABSTRACT

A study examined the educational and labor market experiences of female graduates of agricultural programs. During the study, researchers interviewed 95 female and 84 male graduates of agricultural programs at 3 community colleges and 6 universities in California between the years 1977 and 1979. Survey participants were asked to supply various demographic data as well as information pertaining to the agricultural program from which they graduated, job-related experiences, and recommendations to women entering agriculture. It was found that women were concentrated in plant science, animal science, and ornamental horticulture programs whereas men, although also included in these programs, tended to enroll in more management-oriented programs. Nearly twice as many male students as female students had actual farm backgrounds. While the females perceived little sexism in the educational setting, the situation changed upon their entry or attempted entry into the labor force. Emerging from the study was evidence of wide discrepancies in wage rates between men and women, disproportional promotions and pay raises, and subtle hiring discrimination against women. Recommendations included calls for more internship programs for women and for recruitment of women instructors into all program areas. (MN)

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WOMEN ENTERING AGRICULTURE:
A STUDY OF COLLEGE GRADUATES

Project Director -- Orville E. Thompson

Research Sociologist -- Juanita B. Wood

Research Staff -- David H. Dupre, Kathleen A. L'Ecluse

Allison Henderson

Department of Applied Behavioral Sciences

University of California, Davis

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ABSTRACT

This study builds on previous studies that indicate a large increase in the percentage of female students in agricultural programs and examines what happens to the women in both the educational setting and the labor market. Although the numbers of women are increasing, the women are still being contained in their traditional roles. With a few exceptions, they are not breaking into new areas in agriculture. In essence, women are welcomed with open arms and closed minds.

Included in this study is evidence of wide discrepancies in wage rates between men and women, disproportional promotions and pay raises, and subtle hiring discrimination against women. Interviews were conducted with 95 female and 84 male former students who completed agricultural programs in selected California colleges between 1977 and 1979.

INTRODUCTION

Currently an image is promoted in agricultural literature that the increase in female enrollments in agricultural education programs indicates some sort of social change in the position of women in agriculture.[1,2,3,4,5] Women are breaking barriers and making advances, or so that is implied by such statements as the following:

> Although numbers of agricultural units are decreasing, production is increasing. And this fact should certainly assure capable and qualified women plenty of opportunity to take their places as valuable contributors to the progress of the agriculture industry.[6]

> These ladies are breaking barriers that have said women in agriculture should be behind a desk or in a laboratory, where their exposure to producers is minimal.[7]

Some writers who point out the unusual as indicative of what is possible:

> Women's liberation has come to the hog farm--and producers who have hired women say they're one of the best things to happen to their operations since farrowing crates.[8]

And always the emphasis is on the exceptional woman as an example to point to:

> At the time of the interview Bertemes was, as far as she knew, one of two lone women managing grain elevators in the entire United States.[9]

> She w rks with prison inmates--convicted robbers, rapists, sodomists, murderers--teaching them the ropes of dairying. She is the first female vocational officer at Utah State Prison Dairy Farm.[10]

> 'Only five of the 68 pesticide inspectors in the country are women,' according to Judy Swenson, one-fifth of this federally employed minority.[11]

The image alluded to is that women are successfully breaking barriers on two agricultural fronts: in agricultural education and in the job market in agriculture.

It is true that female enrollment in agriculture has increased. The American Council of Life Insurance indicates that women enrollments in college in general have "almost doubled since 1970."[12] Since women now comprise about one-third of the total agricultural

program enrollments in colleges,[13,14] it may be that agriculture is enjoying a larger influx of women than other programs. This certainly appeared to be the case in vocational education in 1976 based on the information in Table 1. Agriculture realized the greatest increase in enrollments of any of the divisions listed. There is a feeling of movement, of a progression of women being trained in agriculture, hitting the labor force, and assuming positions within the agricultural community.

TABLE 1

TRENDS IN FEMALE AND MALE ENROLLMENTS IN VOCATIONAL EDUCATION (%)*

	1969		1976	
	Female	Male	Female	Male
Agriculture	2.0	98.0	11.3	88.7
Distribution	44.5	55.5	48.0	52.0
Health	92.2	7.8	78.7	21.3
Consumer and Homemaking	95.5	4.5	83.2	16.8
Occupational Home Economics	86.7	13.3	84.7	15.3
Office	78.0	22.0	75.1	24.9
Technical	8.7	91.3	11.3	88.7
Trades and Industry	11.1	88.9	12.7	87.3
Special Programs	41.0	59.0	33.3	66.7

*United States Department of Health, Education, and Welfare, Bureau of Occupational and Adult Education, "Comparative Analysis of Vocational Education Enrollment by Sex in Fiscal Years 1972 and 1975" (Washington, D.C.: Bureau of Occupational and Adult Education, Spring 1977), and Bureau of Occupational and Adult Education, "Enrollments in Vocational Education Programs, FY 1976."

The study with which this report is concerned was initiated to find if this was true. Did increased female enrollment in agricultural programs result in equality of opportunity and ensure equality of employment in the form of movement into agricultural jobs? Were those observers who were writing articles about women in the early seventies

with titles like, "Why you'll be working with...or for More Women in Ag Careers"[15] correct? Is one able, in 1981, to discern a real change in the gender composition of the agricultural labor force?

There was concern about the kinds of experiences women entering a traditionally male field would have, in both the educational system and the occupational world. What happens to these women who are continually being referred to as pioneers? Were "barriers" really being broken, or were the barriers simply changing? There was also interest in what happened to the men in these new situations. Were they forced to change their manner of proceeding because of the inclusion of women or did the system remain relatively indifferent?

Although the primary interest was in tracking women and detailing their experiences, it was necessary also to examine the male experience in the same setting. Obviously, neither a female nor male experience can be characterized without a comparative point of reference. Some barriers to women entering agriculture are also barriers to men. Production agriculture is a good example of a field with barriers to both sexes. The probability of a person actually being able to enter a career in production agriculture is very slight unless he or she inherits the farming operation or is made a partner in a family corporation.[16,17,18] The cost is too prohibitive. As the number of farms and ranches decrease, the number of managerial positions available, presumably to either males or females, also decreases.[19] Most agricultural jobs will be off the farms and ranches and in the agribusiness sector.[20,21]

The female informants in this study appeared to perceive little sexism in the educational setting, but with their entry or attempt to enter the labor force, the situation changed. According to one professor, "We ask recruiters point blank, and they say, 'We're shifting (to hiring more women), but truthfully, we're hiring mostly men.'"[22] This is exactly what was heard from the informants. It is difficult for a woman to get a job in agriculture, and once there, differential treatment and pay are still the rule. The traditional patterns were reinforced: in schools women were perceived as being superior academically, but on the job men were paid more. There will be comments in the appropriate sections on why this may be so.

This report is presented in three sections: the educational setting, the occupational setting, and recommendations based on our informants' perceptions and those of the researchers.

METHODOLOGY

Since previous research indicated a marked increase in female enrollments in the past five years, it was decided to concentrate on students completing agricultural programs during 1977, 1978, and 1979. All levels of post-secondary institutions in California--community colleges, state universities, and universities--had to be included to cover all types of agricultural programs. Given the limited funds, telephone interviewing was the primary means of data collection.

California colleges with strong agricultural programs were contacted for names and telephone numbers of students who were graduated during the past three years. In the sample were three community colleges, four state universities, and two universities. Some of the graduates could not be located. Therefore, the sample may or may not be representative, and statistical data refer to only those students who were interviewed. Literature review and the concurrence of responses to questions in the interviews give the authors confidence that the data represent general trends. The interviews, which ranged from 1/2 hour to 3 hours, were by appointment.

The interview guide was nine pages of open-ended questions, and it covered demographic information, questions about the agricultural program in which the students were involved, job-related experiences, and recommendations to women entering agriculture. Quantitative measures were sacrificed for qualitative data, as the study was concerned with the perceptions and feelings of the graduates.

The final sample included 84 males and 95 females, of whom about one-fourth were graduates of community colleges, one-half were from state universities, and the remainder were from the University of California.

THE EDUCATIONAL SETTING

The Future Farmers of America (FFA), an organization in secondary schools, amended their rules in 1962 to extend membership to females, and the Vocational Education Act of 1963 provided federal monies for courses in occupational areas other than production agriculture.[23] Those acts theoretically expanded the involvement of the educational institution in accommodating the agricultural job market, or at least indicated a growing sensitivity to occupational needs and opportunities. Further, the Vocational Education Amendments of 1976 (Public Law 94-482) stipulated that vocational education programs must be offered equally to women and men and that sex stereotyping and discrimination must be eliminated.

The question to be addressed is not so much, "How did the women enter agriculture?," but rather, "What's happening now that they are in agriculture?" In addressing this question, the following report will include a discussion of the role of gender in the experiences of the graduates and suggestions for institutions in overcoming possible sex bias in their preparation of students for employment in agriculture.

Student Profile and Differential Treatment

Graduates ranged in age from 21 to 54 years; the average was about 25 years. This was about the same for both sexes. A significant number were married (42%, men; 52%, women). Women were concentrated in the animal science, plant science, and ornamental horticulture programs. Men, although included in these majors, tended to enroll in more management-oriented programs (see Table 2).

TABLE 2

STUDENT MAJOR BY SEX*

	Male	Female
Ornamental Horticulture	12	28
Plant Science	6	11
Ag Business (Ag Economics)	12	5
Animal Science (Animal Husbandry, Poultry, Dairy)	7	14
General Agriculture	8	5
Forestry	1	3
Soils (Soil and Water)	8	2
Ag Management (Farm Management, Ag Science & Management)	10	5
Natural Resources (Renewable Natural Resources, Natural Resource Management)	2	5
Viticulture (Fermentation Science)	0	3
Agronomy	3	0
Ag Mechanics	3	0
Entomology	3	0
Food Science	1	4
Ag Education	0	3
Other	7	4
	84	95

*Of those students interviewed

Nearly twice as many men as women had actual farm backgrounds, but the percentage with some exposure to agriculture, either by having near relatives in farming or growing up in a farming area, was about the same for men and women (see Table 3). This lack of background in agriculture is judged to be an important liability against women in the job market. One reason or excuse that can be applied against anyone in any field is "lack of experience," but it seems especially prevalent in agriculture. This was reported by a

TABLE 3

STUDENT AGRICULTURAL BACKGROUND BY SEX*

	Female		Male	
Reared on Farms	21%	(20)	44%	(37)
Other Agricultural Background	14	(13)	14	(12)
No Agricultural Background	65	(62)	42	(35)
	100%	(95)	100%	(84)

*Numbers in parentheses are numbers of persons in sample.

number of our informants in seeking jobs. This mechanism ironically keeps people from doing because they have not done before. It is relevant also when examining the educational sector. Some women reported hesitancy and feeling of clumsiness when they had to compete in laboratory classes with men who already had practical experience. Such comments as the following were made:

> Some of the instructors were resentful of women entering and they (the women) shied away from physical labor. They wouldn't call on you in a lab situation. In some classes, if guys had more experience, they would get called on....If I'd had more of an ag background, it would have helped just in terms of knowing the basics, and people with previous experience knew the teachers beforehand. (Female #45)

Thus lack of experience limits the opportunity to learn as well as the personal connections one makes, such as knowing the teachers beforehand.

One women respondent who was aware of the handicap of not having experience in agriculture noted:

> In the upper-division farm management courses, there are a lot of farm technicalities I wouldn't be familiar with and I would ask for help. I'd pick one of the smarter men with a farm background and ask him. The men had more practical experience....they were able to be out in the field regularly as they worked on their dad's ranches.

When asked if she also got to work on her dad's ranch, she responded:

> If it comes to work being done on the ranch, the guys get to do it first, and if there were no men, then I would get a chance to do it. (Female #43)

Women, even when reared on a farm or ranch, are often not exposed to work at home, whereas men from farms come into agricultural programs with a certain amount of assurance. As a male student noted, "The women tried to get involved, but they were too far behind. The professors let them slide" (Male #132).

One outcome of this lack of practical experience is that women try to compensate by doing more academic work. This then enables them to get better grades, particularly in community colleges and state universities. Although the researchers do not intend to denigrate that accomplishment, it should be mentioned that academic accomplishments are taken frequently as verification of women's inferior status. Grades are seen as an attempt to compensate lack of skill and expertise. Men don't have to worry about grades as much because they assume they already have a lot of "know how" in agriculture, as was more frequently the case. Many could get women to help with the academic work:

> There were a couple of instances where the guys would get irritated at women because they (the women) weren't familiar with the equipment and it would cost them (the men) points on lab assignments (when men and women were lab partners). If the guys knew a girl was smart, they would flock around and the girl would end up doing a lot of work to compensate. The guys would use that. (Male #50)

Another woman observing the traditional male/female tradeoff reported:

> Guys would court girls who got good grades. Usually it was

a steady relationship and he would draw his friends in so she could help them out: taking notes, sharing test papers, and writing and typing. Women would get to be seen with the best guy on the judging team--like football players and cheerleaders. (Female #39)

Rationalizations were produced to account for sex-stereotyped behavior:

> In practical classes the women were hesitant to get dirty and the profs would let them sit back. Some men may have resented that, but most understood why women don't want to get dirty. Since women were not as involved in field stuff, they helped with writing reports and stuff. They were better at that. The men were just interested in doing practical things. (Male #146)

This can be viewed as the most blatant form of sexism couched in "helping each other" terms. The notion that each does what he or she does best is sensible, but only if each has had equal chance and exposure to develop what he or she does best. Many female informants reported this was not the case.

Most of the women informants did not perceive their treatment in the agricultural programs as being particularly sexist, even though being in an inferior position perhaps makes even conditional acceptance seem egalitarian. For whatever reason, in interview after interview, both males and females denied any differential treatment in classes based on sex and then proceeded to cite one sexist event after another. For example:

> We didn't have much competition between the students. If we were out in the field, the guys would crawl under the bushes and the girls would write the report. (Female #27)

> I enjoyed every minute of it. The men students respected you for what you were doing....There was a lot of social interest that helped in the class. The better you looked, the more help you got. (Female #22)

> I was a little sister in an ag fraternity, so the guys would help me--things like using the ag tests on file. The little sister's function is to help them out in any way--bake cookies, party, typing. (Female #45)

> Men and women in horticulture got along very well. They were a small group. When we were doing labs or surveying, the guys just wouldn't give women as much credit for knowing what they were doing. They tend to take over the lab group and decide what's going to be done....I never created any arguments. I just let it go. (Female #8)

The perception of harmony comes from the reinforcement of the stereotypical behavior. There was acceptance and tolerance as long as women continued to be non-threatening and predictable, as long as they continued to "let it go." When women wanted to act in a different way, however, they were faced with uncertainty about how they should behave. One female student (#127) talked about avoiding a field course because she wasn't sure whether she should act "feminine." She also avoided special projects like farming a piece of land because she felt "males would make fun of her." There was a feeling among females that they had to "over-perform" to compensate for the lack of experience because the field of agriculture has long been sex-typed as male. As with all sex-stereotyped professions, the newcomers feel they have to prove they are worthy of entry, even though they know that some systems should be changed simply because they're morally wrong. The question ultimately always comes to that of equality--are women really equal to men? Too often members of one gender consciously or unconsciously try to prove they aren't, whereas members of the other try to prove they are. The question itself keeps the battle going.

The educational institution often promotes sexism in various ways, such as giving internships predominantly to men and allowing only men to sleep in the animal sheds. There are two forms of institutional sexism that particularly deserve examination, one more subtle than the other. First is the counselor or professor who tries to channel students in particular directions. The other is the lack of female instructors for role models.

Student advisors and professors frequently counseled women to go into the more feminine fields like ornamental horticulture and animal science by telling them things like, "Field work is hot, dirty and dusty. Women usually like greenhouse work" (Female #51). Or they advised not to pursue veterinary medicine because they would never be able to get the grades necessary to enter that field. One woman speaks of her husband, who told her she'd never be able to be a farm manager: "I feel bad because he doesn't want me to try. He doesn't want me on the same plane" (Female #43). The institutional counseling

system perpetuates the belief that women should not be on the "same plane."

The issue of physical strength, like experience, is used to set standards of entry into the world of agriculture. Women are advised not to take courses where they have to handle large animals or do any strenuous physical activity. Strength is in many ways a bogus issue, because it is not really necessary in many areas, and yet it is an objective characteristic that can be used to eliminate people. By implication, it assumes that all males can do heavy work, which is not necessarily true.

The power of humor to belittle should not be underestimated:

> I had a counselor who discouraged me because I'm five foot and weigh one hundred pounds. He and another teacher would make jokes about me in class. Things like, 'Would you please stand up if I call your name.' (Female #27)

The treatment of female students as cute little girls who shouldn't get their dresses dirty is difficult to handle. Typically, men are encouraged to take charge, whereas women are encouraged never to strain their mental or physical faculties. Counselors often perpetuate general societal views. One respondent talked about a job she had while enrolled in school:

> I had a lab job in the Toxicology Department, and he (the professor) said they like to hire girls to wash dishes because they do a better job and don't give them as much trouble about doing dishes. I used to finish early and would help a grad student, but I quit because he used to ask me to go look up words. The men who were in the same position were helping with the research and the dishes were secondary. They did five times more research oriented work as I did. (Female #24)

The linkage between preparation for work, counseling, and employment is important. It has been suggested that women are prepared only for low-level, low-paying jobs.

> Vocational education teachers and counsellors have failed to assist women in preparing for the types of occupations that pay higher wages. In fact, women are often discouraged from taking, or not allowed to take, courses that would prepare them for these jobs. Apprenticeship, one of the most important means of entry to skilled and well-paid jobs, remains

> nearly closed to women because of deep-rooted custom, and outright discrimination.[24]

If agricultural jobs are now mainly non-farm jobs, and special education is a requirement for entry, then it is the obligation of the educational institution to prepare students for those job markets.

The large jump in female enrollments in agricultural programs may present a more positive image than exists. Women may be entering a traditionally male field and outwardly appearing to be making progress, but instead they are merely running into the internal structure of roadblocks in the form of counselors and professors who will "feminize" their participation even in a so-called male field.

Of the 179 students interviewed, only 50 had had a female professor. And of the 179, only 66 felt there should be female agricultural teachers. In teaching, the lack of practical experience is again used against women. It is generally felt that unless the female vocational teacher was very experienced, she would not be able to handle the male students. As one student noted, "They would be polite, but they wouldn't respect her" (Male #140). Women in teaching are generally perceived as more nurturant and open. They let details of their personal life out, which makes them more approachable and consequently less valued. They do not present the strong, in-charge image of the male instructor and are, therefore, viewed as somewhat inferior.

Of the students who felt there should be female instructors, the reason given most frequently was to serve as a role model. This means in traditional thinking that female agricultural teachers should teach the more feminine classes:

> Another factor somewhat overlooked is that many women possess a deep rooted interest and love of animals and agriculture, and agricultural teaching is a natural outlet.[25]

Many female students mentioned that women were not encouraged to enter teaching: like veterinary medicine, teaching is viewed as too difficult for women. One woman (Female #143) talked about being in agricultural education and being told shortly before she started student teaching that the advisory committee felt she was too small to handle the students. She also mentioned another woman had been dropped from the program for the same reason. Thus, the progression of women within agricultural teaching is tightly controlled. There is a need for more women agricultural teachers and not just as role models for the female students, but as viable catalysts in the educational process.

Job Preparation

Earlier it was noted that the Vocational Education Act of 1963 theoretically made agricultural programs responsive to the agricultural job market. One of the assumptions built into such a structure is that if courses were responsive to job market pressures, then they must be preparing students for the job market. Students were asked if their particular program was job-oriented, and, if so, how. The responses indicate that the community colleges are doing a bit better informing students about the job market and helping place them. The state universities and universities were generally regarded by the students as not being helpful:

> They didn't tell people that the minimum wage was all they would get (in ornamental horticulture) or that landscaping is a much better place to go. They didn't prepare you for the sexism. I knew about it because of my school experience. (Female #179)

> That's one thing I'm particularly concerned with because the (junior college) was so good and (state university) left it up to the students to go look on their own. The Placement Center basically passes on flyers....There's no information on how to apply your major. (Male #30)

> The Placement Center is not ag-oriented either. They're not interested in finding out what's going on in ag employment. They post jobs in the department, but they don't orient the program around job information. (Female #45)

Time and again the students emphasized the need for more practical experience. They felt the overemphasis on theory was detrimental to learning how to apply it. Internships were one means of integrating practical experience with theory. However, there were not enough internships, and the few available were usually distributed preferentially. With the larger number of students coming into agriculture without practical experience, as in the case of women and non-farm men, internship programs should be vigorously created and required.

Another barrier is lack of information. Salary information and working conditions in various occupations in agriculture should be made available at the <u>beginning</u> of a student's program rather than at the end. In this way, students may legitimately raise

the question as to whether they want to go through a program that leads to traditionally low-salaried occupations.

The educational institution appears to have failed in three major areas: 1) they have not truly assimilated women into all agricultural programs offered, but have tended to contain them within the traditional feminine roles; 2) women have been treated in a sexist fashion by instructors, counselors, and male students; and 3) both female and male students feel a lack of preparation for entering the agricultural labor market.

WOMEN IN AGRICULTURAL OCCUPATIONS

During the 1960's and 1970's, there was an increase in the percentage of women in the work force. By 1978, women constituted 41% of the paid work force, and by the year 2000 their numbers will equal those of men.[26] Past gains have shown that an increase in the numbers of women in the work force does not necessarily mean that the status of working women has improved.[27]

This stagnation can be explained by dual labor market theory, which argues that there is a distinct separation between a primary and secondary sector in the labor market. The primary sector has those jobs that have preferable salary, status, responsibility, and security. The secondary sector is filled with the less-desirable jobs. Women are more often found in jobs in this secondary sector than in the primary sector.[28] In essence, women have made possible the expansion of those low-prestige occupations and have not made any significant breakthroughs into what have traditionally been considered "male" occupations.

> Indeed, a detailed analysis of employment data for the 1950 and 1970 censuses reveals that over this period there was a larger net inflow of men into predominantly female occupational categories than of women into predominantly male occupations.[22]

Some women have made inroads into the traditional male fields, and often articles cite examples of women doubling and tripling their numbers in just a few years. However, this does not tell the whole story. As Corinne Reider[30] puts it, "this rate of growth is encouraging, but the absolute numbers of women in such occupations are so small that it remains to be seen if such growth rates can continue in the future." Men still dominate the top positions and supervisory or management positions,[31] so it is a fallacy to assume that the introduction of a few women into these positions heralds a beginning of a sexually integrated work force.

In agriculture, as in other fields, there is a tendency to identify women in nontraditional jobs and suggest that women are in positions equal to those of men, or that they are well on the way to equality. The examples given in the introduction illustrate this point. The use of these reports to convince others that agriculture has made significant efforts and achievements is misleading and dangerous. As Nancy Eliason[32] puts it, "these reports, while accurate and encouraging, tend to cause complacency toward a serious economic problem...." Stories of successful women are often publicized,[33] yet the frustrations felt by many other women go unnoticed, especially in trade journals and the news media.

In agriculture, for example, there have been few significant advances by women during the past 25 years. Although there has been an increase in the number of women entering the agricultural field, the relative achievements have been small. In 1960, 118,000 women were employed as farmers or farm managers. By 1970, this number had dropped to 62,000. The drop is explained by the decline in the total number of farms, but comparing those numbers to the number of men reveals that in 1960, 4.7% of the farmers and farm managers were women, and in 1970 it was 4.6%.[34] In the agriculture industry in general, the percentage of women employed has remained fairly constant at 18% from 1965 to 1976; the percentage of women employed in wage and salary jobs in agriculture is the same.[35] In studies of specific agricultural employers, the number of women actually declined. For example, in a study of Agricultural Extension:

> Data provided to the Status of Women Committee by the Advisory Committee of Home Advisors showed a decline in the number, percentage, and positions of academic women employed in Agricultural Extension from 1952 to 1972.[36]

Another study, which examined the Farmers Home Administration, noted that in 1938, the predecessor to the FHA, the Farm Security Administration, had 232 women among their supervisory field personnel in one southern region. These women accounted for 21% of all positions.[37] Yet in 1979, only 14% of the supervisory positions in California were held by women.[38]

According to these reports, women have not yet broken the job barriers in agriculture. An examination of the findings of this study tends to reflect the more general occupational picture of women. The areas of examination are: salary, job position and status, and other limitations for women in agriculture.

Salary

Paid women workers in the United States face a depressing economic situation. Since 1961, the average woman's salary has been only 59% of the average man's salary, and this is down from 64% in 1955.[39] The gap between men's and women's wages has not been affected by the increase of women in the work force. Men still dominate in the top positions, and they also hold the top salaries. In 1975, men held 89% of those jobs paying $15,000 or more, whereas only 5% of women employed full time had that salary or one higher.[40]

Occasionally this wage disparity has been explained as differences in educational training, the number of hours worked, job seniority, and absenteeism rates.[41] These four factors are frequently used to justify the existing wage differentials, yet these factors are not sufficient to explain the entire differential. If one looks, for example, at educational attainment and hours worked, relative to salary, one sees a lack of explanatory power in these variables. Education cannot be a sole factor when women with four years of college still earn 59% as much as men with the same education,[42,43] and those women had the same median income of men with only eight years of elementary school in 1974.[44] Women working an equal number of hours as men had salaries that were only 60% as much as men's salaries.[45]

There has been a growing awareness that the wage differential cannot be explained by these factors alone. One major cause must be attributed to segregation and discrimination.

> We can only conclude from an examination of these court decisions that a significant share of the unexplained differential is due to the discriminatory or sexist atmosphere which has characterized our society and culture up to the present time.[46]

Economists estimate that discrimination explains from 29% to 43% of the wage differential.[47] Since women are denied access to the primary labor market, there is an increased supply of women in the secondary market, thereby lowering wages.[48]

> Discrimination therefore directly lowers the female wage in masculine occupations by reducing demand for women in this sector, and indirectly lowers the female wage in feminine occupations by increasing their supply to this sector.[49]

In agriculture, pay scales are somewhat higher for women than in other fields.[50] In a comparison of wage differentials in different occupational industries, the agricultural industry fared the best: women earned 83% of men's earnings.[51] These figures do not consistently hold true when examining specified agricultural occupations, however. For example, in Agricultural Extension, 82% of the women in 1973 were in positions that had a starting salary between $429 and $522. Only 14% of the men were in similar positions.[52]

In agriculture, generally, women do earn salaries that are closer to the men's salaries than the national average. Table 4 shows that the average starting salary for men was $11,624, whereas for women it was $8,829, or 76% of the men's salary. Of special importance in Table 4 is the widening gap when comparing starting salaries with present

TABLE 4

AVERAGE SALARIES FOR MEN AND WOMEN*

	Starting Salary		Present Salary	
Men	$11,624	(51)	$17,390	(58)
Women	$8,829	(65)	$11,685	(55)
% of Women to Men	75%		67.2%	

(All salaries reflect full-time workers. Part-time or temporary jobs were not used in order to ensure equal comparisons)

*Numbers in parentheses are numbers of persons in sample.

salaries. Women did earn 76% of the men's starting salaries, but they now earn 67.2% of mens' present salaries. This can be explained by one major factor. The men are receiving pay increases in excess of those the women receive. One woman in our study was a senior lab technician and noted:

> The women at the winery got no pay increases but the men did....I had one male assistant who I trained and he was promoted above me. (Female #88)

Other researchers have reported this trend for agricultural graduates:

> After two years of working, males received an average raise of $220 per month compared to $110 per month for females.[53]

In looking at the salaries in Table 5, it is clear that the gap is widening each year. Women's starting salaries compared with starting salaries of men have moved from 83.8% in 1977, to 72.3% in 1978, and finally to 69.5% in 1979. The average male salary is rising or holding fairly constant, whereas the average female salary gets consistently lower: from $9,195 in 1977 to $8,350 in 1979. In 1976, women with bachelor's degrees in agriculture were doing better still: the average salary was $9,912.[54] The women are starting at higher salaries, but the rate of pay increase has not been maintained.

TABLE 5

AVERAGE INITIAL AND CURRENT SALARY BY YEAR OF EMPLOYMENT*

	1977		1978		1979	
Initial - Men	$10,970	(22)	$12,030	(23)	$12,010	(16)
Women	$9,195	(23)	$8,700	(24)	$8,350	(18)
Women's Salary as a Percentage of Men's	83.8%		72.3%		69.5%	
Current - Men	$17,910	(22)	$18,100	(23)	$14,260	(13)
(1980) Women	$12,850	(21)	$12,508	(21)	$9,430	(13)
Women's Salary as a Percentage of Men's	71.7%		69.1%		66.1%	

*Numbers in parentheses are numbers of persons in sample.

The differences in salaries received by men and women from various educational institutions reveals some interesting patterns (Table 6). Men from the University of California system earned less, both at the start and currently, than men from other institutions. Those from the community colleges earn the most. It can be argued that the educational or theoretical background from the University has a smaller initial payoff than the practical and experiential focus of the state and community colleges for men in

agriculture, yet for women the opposite seems to be true. The women from the state college system did better initially, but currently those from the universities have higher salaries. The women from the community colleges earn far less than women from the other institutions. The wage differential between men and women is greatest here (56.5% initially and 47.5% currently).

TABLE 6

AVERAGE SALARIES BY INSTITUTION:

UNIVERSITY, STATE UNIVERSITY, COMMUNITY COLLEGE*

		University	State University	Community College
Initial Salaries -	Men	$10,962 (15)	$11,612 (30)	$12,227 (16)
	Women	$8,920 (17)	$9,552 (35)	$6,905 (13)
Women's Salaries as a Percentage of Men's		81.4%	82.3%	56.5%
Current Salaries - (1980)	Men	$16,457 (15)	$17,380 (27)	$18,221 (16)
	Women	$12,771 (15)	$12,220 (30)	$8,648 (10)
Women's Salaries as a Percentage of Men's		77.6%	70.3%	47.5%

*Numbers in parentheses are numbers of persons in sample.

Women from the community colleges are at a disadvantage in two ways. First, they lack practical experience, as did most women, and second, they lack the educational credentials to compete in the labor market. The university system, while criticized for being too theoretical in terms of the job market for men, is an advantage for women because education gives them one marketable asset.

It is not possible to compare the different agricultural majors because of the unequal sex representation in some majors and the insufficient information available in others. Table 7 lists five majors with a sufficient number of respondents to make some

general comparisons. Agricultural economics is representative of the salary problem. For a few women, general agriculture has been a lucrative field: it has the highest average starting salary and present salary of any field. Ornamental horticulture has consistently had the lowest average salaries and greatest differentials between sexes.

TABLE 7

SALARY BY MAJOR*

	Starting				Present			
	Men		Women		Men		Women	
Agricultural Economics	$12,310	(9)	$8,840	(5)	$17,840	(9)	$12,040	(5)
Animal Science	9,520	(4)	8,260	(10)	17,720	(4)	10,990	(7)
General Agriculture	11,810	(5)	10,890	(5)	13,350	(4)	15,670	(4)
Ornamental Horticulture	11,810	(10)	8,270	(21)	17.790	(10)	10,310	(18)
Plant Science	13,140	(4)	8,260	(8)	14,740	(4)	12,110	(7)

*Numbers in parentheses are numbers of persons in sample.

One of the women working in landscaping informed us that the female crew was paid $3.75 per hour, yet the male crew was paid $5.00. She approached her boss and was told that the maintenance crews weren't bringing in enough money to raise wages, even though the men and the women were doing equal work (Female #149). Another ornamental horticulture graduate, who was earning $2.75 per hour to start, mentioned:

> A high school student could do this job, so that's why there are no qualms about offering the same pay to people with or without degrees. (Female #38)

One reason for the low salary for women in ornamental horticulture is that many of them are paid the minimum wage. Hourly wages generally signify lower status and lower pay. Over half (56%) of the women were paid an hourly rate, whereas only 30% of the men were paid hourly.

Many of the men were dissatisfied with their salaries also, especially with their starting salaries. One of the men observed, "Yeah, we are all on a sinking boat

together. A lot of guys are getting out of ag now" (Male #170). Another mentioned:

> Ag is usually a low-paying field, especially jobs in the production end. A guy may make a lot of money but have to put in 80 hours a week. Ag has got to begin paying more and demanding less in time. (Male #162)

Men are, in fact, earning very close to the national average in 1977 of $17,891 for male college graduates.[55] The males in this study earn $17,390 currently, yet the observation made above about hours worked, if true, means that men earn less per working hour. Some of the male informants were finding that jobs outside of agriculture were more rewarding:

> You need a Ph.D. to get a decent living in agriculture. I looked for ag jobs, but got disgusted with the field and gave up....They just don't pay. Instead, I went directly back to construction...good pay. (Male #53)

Job Position and Status

Increased enrollment of women in agriculture in California means more and more women are vying for agricultural jobs each year. Many of them are finding desirable jobs, and some are beginning to compete with men in the primary sector of the job market. Most women, however, are still competing for those jobs in the secondary sector, which are low-paying and low-status. Even when men and women with comparable academic preparation are in the same general occupational category, such as agriculture, women are still being kept out of the better-paying, more prestigious jobs. One woman in our study talked about an argument she had with a male agricultural salesman:

> He was talking about how many women they were hiring in this chemical company...and how it was a fantastic change in the ag field....I said that it stinks because women are only given rock-bottom jobs, like a secretary or field checker. (Female #88)

In a study of Cooperative Extension in 1973, twice as many females entered the lowest ranks, and no women were in the two highest steps or in the administrative "line" positions.[56] This phenomenon has been reported by others who have studied women in agriculture.[57]

Nationally, women have a higher unemployment rate than men[58,59] and the gap is widening. For example, in 1960, 5.9% of women and 5.4% of men were unemployed; by 1976,

the rates had risen to 8.6% and 7.0%, respectively.[60] In 1979, the unemployment rate for women was 7.0%; that for men was only 4.9%.[61] The women in this study had an unemployment rate of 11.6%; only 4.8% of the men were in the same position. (Another 8.4% of the women were not in the paid work force and not actively hunting for a job. Most studies tend to ignore this factor, and yet it is important, because the lack of opportunity in the job market may be the cause of such a high rate of unemployment among women in agriculture.) Several women in this study were not looking for jobs in agriculture, or had taken positions outside agriculture, where opportunities were more favorable. A food science major, who had worked at several agriculture-related jobs, noted:

> There was too much discrimination in ag. I was sick of it....There were no pay raises for women, they move people around a lot. Men got promoted over me...so I finally quit and went into the real estate business. (Female #88)

As mentioned previously, women do not ordinarily compete with men for jobs in the primary sector or for those jobs traditionally reserved for men. Very few women have moved into the traditional male-oriented occupations in agriculture. In a study of Yolo County in California, only one woman in a sample of 200 had a "male" job, and her job was seasonal and had no fringe benefits.[62] Six females, compared with 20 males, in this study were employed in positions that involved supervision or management. The jobs in which women were in some form of management were generally in horticulture. (When questioned about what kinds of jobs their fellow students were getting, reports were fairly traditional. At a cannery job one male (#131) had, only 2 out of 40 supervisors were women. Another male (#161) reported that women in ornamental horticulture get jobs in sales, design, or estimating, whereas men get jobs in maintenance, supervision, or management.)

Many of the women find themselves in jobs for which they are overqualified, and others are in jobs that require no agricultural training at all. In this study, one in five of the female graduates was a secretary or bookkeeper in a nursery, on the family farm, or a similar place. One informant stated:

> The men and women end up doing different things. The men almost always go into ranch management. The women choose secretarial work or bookkeeping....Women don't choose to go into management, as it would be very hard for them to get a

job if they did. (Female #19)

An even larger percentage (23.8%) of the women are in sales positions, primarily in ornamental horticulture. Many state their job can be done by any high school student, and yet employers require an ornamental horticulture degree.

One common assumption made in agriculture, both by some researchers and the men and women interviewed, was that government was the major employer of women in agriculture.[63] The feeling was that private industry hired only a few token women and that the government, because of court mandate and affirmative action, is more open to hiring women.[64,65]

> There are not many women in the private sector yet...the laws might have something to do with the fact that there are a lot of women in the government sector as opposed to the private sector. (Male #26)
>
> One Black woman with a Spanish surname was hired automatically (by the USGS). Women have an easier time. The men feel discriminated against but it's not too bad because there are enough jobs. (Male #70)
>
> The U. S. Forest Service intern program...helps to get minorities and women employed. They take more women than men....The problem for women is in private industry. (Female #74)

Most of the women in this study, however, were employed by private industry. Of the women in agricultural occupations, 27% had worked or currently were working for government, compared with 13% of the men.

The government, although hiring more women, may also place females in lesser positions. One woman, commenting on her employer, the U. S. Department of Agriculture, said:

> The lab technicians are mostly women. A man was given a supervisor job even though he did the same work as the women. He hadn't even graduated from college. (Female #45)

Limitations for Women in Agriculture

It can be inferred from the previous two sections that women in agriculture, both in this study and in general, are at a disadvantage in terms of salary and job status. Women tend to be limited to the low-paying, low-status, dead-end jobs in agriculture. In the

first two sections, we were mainly concerned with describing the situation. This section will analyze why women are limited, both in job selection and job advancement.

Barriers to women in employment and advancement can range from seemingly harmless jokes to direct discrimination. Often the sexist attitude is manifested in relatively subtle acts such as side comments, looks, etc. These subtle acts, taken individually, seem to be of little matter. Women are hesitant to take action or complain because they will be branded as troublemakers. Women in this study reported that these subtle acts are not isolated situations. Instead, they encountered a series of minor events that formed a pattern of obvious discrimination and sexism. Mary Rowe (1977) has described the events of subtle discrimination as forming a set of 'Saturns rings' around a goal--specks of dust, each one in and of itself inconsequential but, in the aggregate, a concentric series of insurpassable barriers.[66] This type of discrimination is hard to quantify and, even if it is unintentional, results in the limiting of opportunities for women to enter skilled, highly paid, and creative positions.[67]

Lack of experience, previously discussed in relation to classroom situations, is an even bigger obstacle when entering the job market. In many occupations in agriculture, experience is seen as a requirement.[68,69] Fewer of the women in this study came from farm backgrounds, and this in fact restricts them from competing equally with males for jobs. Comments like "Men get jobs because they have more experience" (Female #45) were heard throughout the interviews. One woman who had a master's degree could not find a job because she had no practical experience. Eventually, she had to settle for helping her father with his bookkeeping. Experience often takes precedence over education.

> Farmers don't value education much, so women are at a disadvantage. (Female #48)

> The industry hasn't realized the value of education. When they do, women will be accepted. (Male #46)

Those women without experience are caught in a vicious circle. One interviewee with a degree in ornamental horticulture reported that she applied for the position of a supervisor in a large nursery and she was rejected because she had no experience. Instead, she was hired to do secretarial work in the office. She commented, "How do they expect me to get experience if they only give me a job like this" (Female #165). Another expressed her frustration, "The lack of experience factor is just a way of keeping women out of agriculture" (Female #43).

Although lack of experience is often used to reject female applicants, those with experience could not compete equally with males. One male (#140) noted that "the farmers are prejudiced. They wouldn't hire a woman with experience, but they'll hire a man with none." Employers tend to look at each male applicant as an individual and determine whether he would be suitable for the job. But the general assumption about women is that they do not have the necessary qualifications, and they are all treated as if they are at the same skill level. As one male interviewee stated, "Having never hired a women before, I would assume she's not capable" (Male #84).

The tendency to generalize about women often leads to discrimination against all women, using lack of experience as the reason. Most employers tend to agree with Hunt's[70] description:

> A majority of those responsible for the engagement of employees start off with the belief that a woman applicant is likely to be inferior to a man in respect of all the qualities considered important.

Opportunities to enter production agriculture are limited by basic economic factors.

> The price of a ranch or farm in California that would support a family of four could cost several hundred thousand dollars; a price well beyond the reach of all but a very small percentage of the population. In terms of those just leaving college, their age, credit rating, credit history, and earning will undoubtedly be found lacking.[71]

Both men and women coming out of school face this problem if they want to be involved in production agriculture. Entering production agriculture through a farm management position or similar job is easier for males. One man reported that he raised some money by using a small piece of property given him by his grandparents. Yet he feels a woman with the same leverage would not be allowed to buy a farm:

> A woman could never get a loan like I did. The loan officer wouldn't feel she could run a farm. The woman would have to be married to do that. (Male #136)

Another male farmer advised:

> The only way for a woman to get into farming is to be a widow of a farmer, and even then she would have to be real

lucky or driven to keep it going, or to be married to a farmer who lets her get involved. (Male #132)

A lady sent dad a resume for the foreman position but he wouldn't even look at it. He said he didn't want a woman. (Female #43)

Consequently, even when they have comparable farm experience backgrounds, males still have advantages in employment and in land ownership. Historically farms are passed on to the sons so that "farm reared boys have a virtual monopoly on the career of farming."[72] In this study, over half (60%) of the males from farms returned to that business, whereas only 16% of the females from farms returned.

Occupations that require direct contact with farmers, such as salesman or pest control advisor, present barriers to women. A general impression is that farmers are conservative, slow to change, and unwilling to take advice from a woman. A farmer explained:

The fertilizer business would use women if it could, but since the farmer won't listen, they can't hire women. Any business dealing with farmers will have no women employed. (Male #132)

Or a twist of the same theme:

Farmers are willing to hire women pest advisors, but their wives make them fire the woman because the advisor is too pretty. (Male #75)

One of our interviewees did have this type of problem with the wives. She was a pest control advisor and the wives told her "not to come out to the field unless I'm there." This is a form of the classic "blaming the victim."

Not surprisingly, one area in production agriculture that seems to be open to women is in the care of certain animals:

Men are beginning to recognize that women with their 'mother's instinct' do better with animals. If an animal gets sick or needs help at night, guys don't want to take care of it, but women will. They're more conscientious, notice more of what's going on, and they're not there just to make the money. (Female #16)

This self-sacrificing image of women caring for animals is played up generally in the agricultural literature. Women are supposed to have those nurturant qualities, and this behavior is emphasized.

> When Thelma took over the farrowing house, death loss immediately dropped....Maybe it's the 'mother instinct' or something, but she did a much better job than the man we had in before.[73]

This perpetuation of the idea that women are more nurturant tends to keep women in the traditional feminine role, working for love instead of money and doing those things that men don't want to do anyway, like nursing a sick animal.

> My husband said that women are better with social organizing...better with small animals...better nurses, and directors of non-profit organizations. He discredits my success by saying it's because of my sex (nurturant abilities) rather than any business sense. (Female #116)

Another limiting factor that is clearly used to exclude instead of being a valid concern, is the issue of physical strength. Many of the women felt there was an overemphasis on physical strength:

> The beef industry is a male industry. There's an idea that beef cattle are harder to manage (than small animals). This is a myth because no one picks up a cow and weighs it. You use a scale. Men just want to keep the cattle industry sacred. (Female #116)

> The attitude in the artificial insemination industry was 'no way would we hire a woman.' They feel a women couldn't handle cows even though the cow would be cornered in a chute anyway so she wouldn't need strength. (Female #124)

Men, predictably, seemed to feel strength was a real separating issue: "Out in the field men are better than women. Anytime there's a lot of physical work, a man is better" (Male #53). When women apply for jobs that do require strength, they are often turned down without even being given the opportunity to show whether they can handle the job. Some of the men may not be able to handle certain jobs, but they are judged individually. Women are stereotyped as a group.

Even today when a woman is hired, because of initial prejudice, she feels she must work extra hard to prove herself capable. A woman is generally watched much closer than a man in a similar position:

> A woman has to know her stuff and a guy doesn't in a job. They (employers) tend to feel a guy will catch on, but they don't give a woman that chance to pick it up on the job. (Male #44)

The message imparted is that women have to be more qualified than a man for the same job. "The mediocre man is accepted, but not the mediocre woman."[74] Too frequently when a woman is hired to do a "man's job," she becomes the unofficial representative of every other woman. If she fails, it is not an individual failure but a failure of all women.

One very obvious difference between the men and women in this sample was the method they used in finding jobs. Women generally did not have the extensive personal contacts enjoyed by many men. This is a common problem that women have generally in all occupational categories:

> Among barriers to entry into male jobs are exclusion by the male in-group, the 'old boy' networks, the male oriented protegé system.[75]

Men and women used the resources at school such as the Placement Center about equally. This, however, accounted for only about one in ten placements. About four in ten women received their jobs through a personal contact (friend, family, instructor, advisor), whereas six in ten males used a personal contact. Over half the women (51%) were forced to go through the traditional application processes, whereas only 28% of the men found employment in this manner. As might be expected, women did not have the "in" with the agricultural industry enjoyed by most men.

Although most problems discussed thus far are attitudinal, they do indeed form a pattern of sexism that is pervasive and not likely to change immediately. There are more direct forms of discrimination also:

> This interviewer just told me to leave because I looked like the type that would get married and split. It's illegal....and a woman should fight or ask for a different interviewer, but you get so tired of fighting. (Female #150)

This is reminiscent of the female jockey who also got tired of confronting male domination:

I figured the only way to get along with men was to quit riding against them so I gave up riding in races in 1972. I started training, but it was the same problem. The resentment was still there. But since I had horses, and jockeys need horses to ride, they began treating me much better.[76]

What women lack is not experience or strength, but power. If one has the equivalent of a stable of horses which are needed by males, then one can more readily expect the kind of respect one would prefer.

There is also a series of assumptions, sometimes called myths, that tend to affect women's involvement in the work force.[77,78,79] The belief mentioned above that women will not stay as long as men in a job is one of the assumptions. Some of the others are:

1. Women are more likely to quit than men.
2. Women are absent more than men.
3. Women do not need to work.
4. Women will not relocate.
5. Women are too emotional.
6. Women do not make good bosses--men don't like women bosses.
7. Women ask for special privileges.
8. Women who succeed have lost their femininity.

Some of these attitudes appeared in the responses from the men and women in this sample:

Men don't like women supervisors. (Male #66)

Women aren't farm managers because it's hard for low educated people to accept women supervisors. (Female #103)

Employers don't like to hire women because they'll leave when they have kids. (Female #79)

Women are more interested in personal gratification than a job or a career. (Female #91)

Most women are more emotional than men. It affects their decisions. (Male #166)

Some of the men and women believed that these myths were true, and that they should be considered during a job application. Yet most of these assumptions are built on false premises or outdated information. Job absenteeism, for example, and turnover rates are much more dependent on job status than sex. The assumption that women do not need to work

is also not true. Most women who work do so because of economic need.[80] The myths are more a result of a cultural lag in that situations change faster than attitudes. Women are working and doing, and yet are still perceived as ideally being dependent. The idea that women do not make good managers, drawn from men saying they do not like them, is more an indication of the strength with which old beliefs are held than any accurate perception of abilities.

The most important issue to examine here is the stereotypical impressions of women that limit their employment in agriculture. Some examples of very minor incidents that men and women noticed were mentioned by interviewees. Again, taken as individual acts, they might indeed be considered harmless, but as we have stressed before, they are part of the pattern of discrimination:

> He (the boss) treats us like servants....He expects women to do what he wants...get coffee. Once he asked me to go to the store to pick up something for him. (Female #179)
>
> They ask me to make coffee at meetings. (Female #83)
>
> The boss jokes about how women can't work when they're having their period. (Female #151)
>
> Customers (at nursery)...wouldn't believe I knew anything and they didn't want to listen to me. (Female #12)
>
> A farmer is embarrassed to meet with women if he is all dirty. (Female #46)

Is the agriculture industry changing? Are employers more willing to accept women as more of them enter the job market? A number of the people in this sample feel that as men coming out of college today begin to move into positions of responsibility and power, the acceptance of women will follow. They feel that their peers understand that there is no difference between men and women and the most important criterion is ability. From the general responses of our male informants, however, it seems that many of the prejudices of the older generation are still in full force in the upcoming generation. Even when the men feel they are liberal, one can see visages of "old thought" creeping in:

> It would be hard for a woman in my position. I have to deal with idiots and be rude. Women like to take things slowly and get along with people. Most women are more emotional also. (Male #166)

> A woman wouldn't want to work that hard around pesticides. Not for these ridiculous wages. She could be a secretary and earn the same....Wouldn't have to take the guff from the guys or come home smelling like pesticides. (Male #10)

One woman who works as an agricultural teacher at a junior high school said her students say, "Go back to the kitchen" (Female #171). The attitude of some men is that women still do not belong in agriculture. They are willing to accept an occasional woman, but she is the exception. They see her as unique and not as they perceive the rest of that class known as "women."

The men that feel most threatened by women entering the agricultural labor market are those who are in, or searching for, positions that are similar to the positions for which women are applicants. The U.S. Department of Labor (1978:9) found that managers at the higher levels are more favorable toward equal opportunity than managers and supervisors at the lower level jobs. Those managers at the lower levels feel the threat of competition.[81] Men coming out of agricultural colleges today are the ones who feel the pressure from women. A woman in our study sums it up:

> The winemaker is an older man. He just likes hard-working people, male or female. It's the assistant winemakers who don't like me because they feel threatened by me....When I was in a lab position, things were fine because they didn't think I would move up. Now there are problems because I'm in a position to take their jobs. (Female #173)

Thus it appears as if women will have a difficult time gaining acceptance in agriculture for two reasons. First, agriculture is still traditional and conservative. Many of the people in agriculture are not ready to give ground and accept women as equal partners. Second, those that are not tied to the traditional beliefs in agriculture may still keep women from gaining access to jobs for economic reasons. They do not want competition.

RECOMMENDATIONS AND CONCLUSIONS

The emphasis in this study has been on the experiences and attitudes of men and women who have completed agricultural programs in California colleges and universities. The target for the findings are the educators and students in agricultural schools. Also, employees in agriculture must be made aware of the problems women face who are now in competition for jobs. The information from this study will provide administrators, teachers, and students the basis for demanding a more equitable role in agriculture for women.

There has been a dramatic increase in the number of women enrolled in agricultural programs in the past few years, yet this increase does not ensure women equal and fair treatment in the educational setting, nor does it provide women with adequate resources to compete for employment on a par with men.

Recommendations for educators are based on information gathered from those going through the system: the graduates. This is believed to be the place to begin to alter the system. Following is a summary of findings from the occupational portion of the research followed by a summary of general recommendations. A major recommendation is that the occupational summary be made available to every faculty member and student in every agricultural program in California, as this current and relevant information is needed as a basis for career-decision-making.

SUMMARY OF OCCUPATIONAL FINDINGS

1) Women's starting salary was only three-fourths that of men. Women in this study earned an average of $8,829 as a starting salary, whereas men on the average started at $11,624.
2) The wage gap widens as men and women stay in the work force. Men apparently receive higher raises. The women earn $11,685 currently (average salary), or two-thirds of the men's present average salary of $17,390.
3) Starting salary for males has either increased or remained relatively constant since 1977, whereas starting salaries for women has decreased steadily.
4) In terms of salaries, men from the community colleges fared best, and those from the University of California earned the least, suggesting that practical experience is most important relative to entry level salary. Women, on the other hand, had the highest salaries when they came from the universities and the lowest when they came from the community colleges, possibly because of the perceived or actual

lack of practical experience for women. Thus, educational training is a marketable asset in terms of job hunting.

5) Entry salary appears to be related to academic major. Men starting in plant science and agricultural economics command the highest salaries. For women, entry salaries for those in general agriculture were higher than salaries for those from other majors.

6) The unemployment rate for women was very high (11.6%). Another 8.4% were not looking for work. Men had an unemployment rate of 4.8%. The unemployment rate for women in agriculture was higher than for women generally.

7) Only about half as many women as men in this sample were in management or supervisory positions.

8) Many women graduates were found in hourly positions of low status.

9) Over one-fourth of the women (26.9%) in our study were in government jobs. This was double the proportion of males in government jobs (13.1%). The majority of both males and females worked in the private sector.

10) Women were limited in their involvement in agriculture by:

   a. actual or perceived lack of experience
   b. male domination of farming and farm-related occupations
   c. tendency for men to be judged individually but for women to be judged on the basis of group generalizations, such as lack of strength
   d. women have to prove themselves capable of a position, whereas men are given the opportunity to learn on the job
   e. women lacked contacts for job placement, thus giving men more of an edge on the job market
   f. discriminatory practices, such as asking illegal personal questions during job interviews

GENERAL RECOMMENDATIONS

1) Occupational information, including this summary of occupational findings, should be distributed within all agricultural programs in California. This information should be made available at the point of entry rather than at the end of a student's program. All job information--what kinds of jobs are available by major, potential employers, salary, working conditions--should likewise be presented when students enter a field rather than when they get ready to leave it.

2) The educational institution is responsible for providing occupational information, but specifically assigning responsibility should be worked out by each institution. However, whether a decision is made to use the Placement Office, the department chair, individual faculty members, or counselors, there should be an effort to keep a current file on jobs available. This involves regular contact with the occupational world and an effort to assess projected job demand. The educational institution should then use this information in its own curriculum evaluation so that courses are continually evaluated for relevance to the project job market.

3) A procedure should be established to detail where students from each institution are placed in the job market. This information should also be made available to current students at the beginning of their programs.

4) Counseling--how to write a resume and participate in an interview--should come near the end of the program. In addition to this general type of guidance, there is a particular need for women to be made aware of the degree of sexism they will encounter, along with suggestions as to how best to handle those situations. Again, the best information source here is women who are actually working in agriculture. These women should be available for seminars, as many women in this study were unaware of sexism in the world and were not prepared to cope with it.

5) To eliminate lack of experience as a deterrent to placement of women, more internships in the agriculture sector should be created, and special classes in field work should be required for students coming into agricultural programs without a farm or related background. These recommendations apply to both male and female students, but it is more important for women because of the strength of the prejudices still in effect against them. Men without experience are frequently allowed to learn in the classroom or on the job. Women most often are simply excluded.

6) The course requirements for women should be the same as for men. Instructors should not allow women to "slide," nor should they (or counselors) promote certain classes over others based on perceptions of appropriateness by gender.

7) Women instructors should be actively recruited for every field in agriculture. This involves more than a need to provide role models for female students. Female instructors are needed to ultimately change the composition and nature of existing agricultural programs. "Old boy" networks will not be reduced in power until the number of "old boys" matches the number of "old girls."

These recommendations are based on statements made by the students interviewed. Students who have been through the programs and have entered, or attempted to enter, the labor force, are the best analysts because they have the "insiders" view. It is hoped that their comments will be noted by those systems of which they are a part.

FOOTNOTES

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